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Booth Udall, PLC 1155 W Rio Salado Parkway Suite 101 Tempe, AZ 85281			EXAMINER KOPPIKAR, VIVEK D	
			ART UNIT	PAPER NUMBER
			3686	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

09/510,607

**Applicant(s)**

KENNEDY, BRIAN M.

**Examiner**

VIVEK KOPPIKAR

**Art Unit**

3686

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 May 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 43-74 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 43-74 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SG-06)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- 7) ☐ Paper No(s)/Mail Date 5/18/2011

## **DETAILED ACTION**

### ***Status of Application***

1. This communication is in response to the "Amendment" and "Remarks" filed on May 25, 2011. This is a Final Rejection. The Information Disclosure Statement (IDS) filed on May 18, 2011 has been acknowledged.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 43-48, 50, 59-64, and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over James et al., EP 425,405 A2 (hereinafter James) in view of Fields et al., Pat. No. 5,459,656 (hereinafter Fields) and Rhodes, Dusty, "The keys to the enterprise: integrated applications drive information systems to new horizons - enterprise wide integration"(hereinafter Rhodes) and in even further view of US Patent Number 5,727,164 to Kaye.

(A) As to claim 43, James discloses a system for managing data associated with available-to-promise (ATP) products (processes that take place in a typical manufacturing environment from the time the orders are received and the logic to arrive at the capability to promise and confirm planned shipping dates based on capacity constraints and product availability)(page 5, col. 2, lines 32-49), comprising:

(a) planned supply of the product (i.e. planned orders to cover net requirements)(page 4, col. 1, lines 16-22 and page 7, col. 1, lines 47-51); and

(b) customer orders for the product through each seller (i.e. customer order servicing)(page 5, col. 2, lines 32-43).

James does not explicitly disclose two seller models that each represent a seller for one or more products each product being associated with a product forecast model; and forecasted sales of the product through each seller.

However, Fields discloses each product being associated with a product forecast model (i.e. model covers each of a plurality of products)(col. 2, lines 1-9 and col. 5, lines 46-63); and forecasted sales of the product through each seller (i.e. forecast profile)(col. 3, lines 41-53). Finally, Fields discloses at least two seller models that each represent a seller for one or more products (i.e. the model should cover each of a plurality of products or business items to determine future business demand for a specific location)(col. 2, lines 1-9).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the teachings of Fields within the James system in order to provide products in timely response to customer demands (col. 1, lines 37-43).

James does not explicitly disclose pre-allocated supply of the product to each seller and the system operable to compute the amount of the product that is ATP at each seller according to the planned supply, the customer orders, the pre-allocated supply, a hierarchy of seller models, and the amount of the product that is ATP at one or more other sellers at a higher level in a seller hierarchy.

However, Rhodes discloses pre-allocated supply of the product to each seller (i.e. plan sales expectations)(pages 4 and 5 of the NPL document Rhodes) and the system operable to compute the amount of the product that is ATP at each seller according to the planned supply,

the customer orders, the pre-allocated supply and the amount of the product that is ATP at one or more other sellers (i.e. linking sales and marketing strategies to material and resource scheduling ...)(page 3—Image version of document). As per the recitation of “the pre-allocation of the supply of the product to each seller occurring prior to distribution of the pre-allocated supply of the product to each seller,” the Examiner respectfully submits that Rhodes discloses an order department being able to “look” into the manufacturing system to determine what is currently in production to give a viable ATP date (page 2). It is noted that a product must be allocated to a seller before it is distributed to each seller. For example, a customer placing an order for a product and being told when it will be delivered has “allocated” the product for himself (See also Applicant’s Background of the Invention, page 2, lines 15-26). The product is then delivered to the customer (“distributed”) after an order has been placed (See also Applicant’s Background of the Invention, page 2, lines 15-26). As per the recitation of “a hierarchy of seller models” and “at a higher level in a seller hierarchy,” Rhodes discloses allowing business information systems to communicate with different trading partnerships, where the system encompass the flow of physical goods (and information) from the supplying organizations into the businesses and subsequently to its customers (Note: Page 6, Paragraph 5 of the (non-patent literature) (NPL) reference of Rhodes teaches transferring goods from supplying organizations to businesses and then to customers which is a form of hierarchy. In addition, Page 5 of this NPL reference teaches resource planning with respect to purchasing and production and the Office takes the a supplying organization plans production based on the demand from businesses that their seller model forecasts and a business in turn plans their purchasing based on demand from customers

that their seller model forecasts. Therefore, this section of Rhodes implicitly discloses a hierarchy of seller models and one or more seller models.)

Finally Rhodes teaches a process that adjusts the pre-allocated supply of the product to each seller according to customer orders across a time horizon and re-computes the amount of the product that is ATP at each seller according to the adjusted pre-allocated supply (Rhodes: NPL Document of Rhodes—Page 5, Lines 43-65.) (Note: Rhodes states in this section that the available to promise estimate given to a customer is accurate and current and states that when a customer calls to place an order an available promise date is given to the customer which is accurate and current. Based on this disclosure, the Office takes the position that each time a new order is placed by a customer then the pre-allocated supply would have to be adjusted (by the supplying organization) to meet the customer demand and the available to promise date would necessarily be recalculated in order to produce a current and accurate date available to promise dates as required by Rhodes). (Note: Fields also teaches this adjusting and re-computing feature (Fields: Col. 6, Ln. 4-23).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the features as disclosed by Rhodes within the James and Fields combination for the motivation of allowing access to relevant data, facilitating fast decision making and providing material and resource management information to sales and marketing teams (Text Version of the document of Rhodes—NPL Page 4--Abstract).

The above references do not teach the following feature which is taught or illustrated by Kaye (Col. 3, Ln. 50-Col. 4, Ln. 26):

(wherein each seller model represents a seller of one or more products) within a hierarchy of sellers and within a seller organization.

At the time of the invention, it would have been obvious for one of ordinary skill in the art to have modified the combined teachings of Rhodes in view of James in view of Fields with the motivation of having a means of forming a family of sub organizations which maintain and manage a common, universal inventory in a common format that can be converted into local inventories, as implied by Kaye (Col. 3, Ln. 50-67).

(B) As to claim 44, James in view of Fields in view of Rhodes in view of Kaye does not explicitly disclose the system of Claim 43, further operable to adjust the pre-allocated supply according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria.

However, Rhodes discloses the system of Claim 43, further operable to adjust the pre-allocated supply according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria (i.e. forecasting and DRP)(page 3). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the system of Claim 43, further operable to adjust the pre-allocated supply according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria as disclosed by Rhodes within the James and Fields combination for the motivation of allowing access to relevant data, facilitating fast decision making and providing material and resource management information to sales and marketing teams (page 1).

(C) As to claim 45, James in view of Fields in view of Rhodes in view of Kaye do not explicitly disclose the system of Claim 43, further operable to:

communicate forecast models to a remote system; receive from the remote system a promise computed at the remote system for a customer order requesting a quantity of a product through each seller, the promise being computed according to the allocated supply;

receive from the remote system adjusted forecast models reflecting the promise; and recompute the amount of the product that is ATP at each seller.

However, James discloses receiving a promise for a customer order requesting a quantity of a product through each seller, the promise being computed according to the allocated supply (see abstract, page 5, col. 1, lines 33-59 and page 6, col. 1, lines 18-30). James further discloses receiving a promise for a customer order requesting a quantity of a product through each seller, the promise being computed according to the allocated supply re-computing the amount of the product that is ATP at each seller (page 3, col. 2, line 48 - page 4, col. 1, line 1). In addition, Fields discloses receiving adjusted forecast models reflecting the promise (i.e. variation between actual demand and the forecasted demand is used to update base and influence profiles and the forecasted demand is re-determined)(see abstract and col. 15 and col. 21, line 18 - col. 22, line 12).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include receiving adjusted forecast models reflecting the promise as disclosed by Fields within the James system in order to provide products in timely response to customer demands (col. 1, lines 37-43).



Although James and Fields do not explicitly disclose remotely located systems, Rhodes discloses enterprise wide integration of sales, marketing, material and resource systems (i.e. SOP)(see abstract). Rhodes further discloses that forecast information is communicated to a remote system (i.e. forecasting is used to drive the master production schedule) (page 3, lines 11-25). The remote system transmits a promise reflecting a customer order requesting a quantity of a product through each seller, the promise being computed according to the allocated supply (i.e. MPS linked with order management such that when a customer places an order., to determine what's currently in production to give viable available to promise dates)(page 3, lines 12-25).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include performing the steps of claim 13 in remotely located systems within the James and Fields combination for the motivation of achieving business goals such as improved customer service, increased productivity and greater profitability (page 1, lines 43-45 and page 2, lines 14-25).

James and Fields do not explicitly disclose computing a promise for the customer order, the promise being computed according to the pre-allocated supply of the product. However, Rhodes discloses computing a promise for the customer order, the promise being computed according to the pre-allocated supply of the product (page 3).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include computing a promise for the customer order, the promise being computed according to the pre-allocated supply of the product as disclosed by Rhodes within the James and Fields combination for the motivation of allowing access to relevant data, facilitating fast

decision making and providing material and resource management information to sales and marketing teams (page 1).

(D) As to claim 46, James in view of Fields in view of Rhodes in view of Kaye does not explicitly disclose the system of Claim 45, wherein: all forecast models for one or more sellers are communicated to the remote system; the system receives from the remote system a promise also computed according to the amount of product that is ATP at one or more other sellers; and adjust the amount of the product that is ATP at one or more other sellers if the promise exceeds the allocated supply for each seller.

However, James discloses receiving a promise for a customer order computed according to the amount of product that is ATP at one or more other sellers (see abstract, page 5, col. 1, lines 33-59 and page 6, col. 1, lines 18-30). James further discloses adjusting the amount that is ATP at one or more other sellers if the promise exceeds the allocated supply for each seller (page 3, col. 2, line 48 - page 4, col. 1, line 1). In addition, Fields discloses receiving forecast models for one or more sellers (see abstract and col. 6, lines 35-60).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include receiving forecast models for one or more sellers within the James system in order to provide products in timely response to customer demands (col. 1, lines 37-43).

Although James and Fields do not explicitly disclose remotely located systems, Rhodes discloses enterprise wide integration of sales, marketing, material and resource systems (i.e. SOP)(see abstract). Rhodes further discloses that forecast information is communicated to a remote system (i.e. forecasting is used to drive the master production schedule) (page 3, lines 11-

25). The remote system transmits a promise reflecting a customer order requesting a quantity of a product through each seller, the promise being computed according to the allocated supply (i.e. MPS linked with order management such that when a customer places an order..., to determine what's currently in production to give viable available to promise dates)(page 3, lines 12-25).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include performing the steps of claim 13 in remotely located systems within the James and Fields combination in order to achieve business goals such as improved customer service, increased productivity and greater profitability (page 1, lines 43-45 and page 2, lines 14-25).

James and Fields do not explicitly disclose adjusting the amount that is ATP at one or more sellers if the promise exceeds the pre-allocated supply of the product to each seller.

However, Rhodes discloses adjusting the amount that is ATP at one or more sellers if the promise exceeds the pre-allocated supply of the product to each seller (page 3). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include adjusting the amount that is ATP at one or more sellers if the promise exceeds the pre-allocated supply of the product to each seller as disclosed by Rhodes within the James and Fields combination for the motivation of allowing access to relevant data, facilitating fast decision making and providing material and resource management information to sales and marketing teams (page 1).

(E) As to claim 47, James in view of Fields in view of Rhodes in view of Kaye does not explicitly disclose the system of Claim 43, wherein the forecast model further represents a

quantity of the product each seller has committed to selling, the system operable to adjust the pre-allocated supply of the product for each seller according to the committed quantity.

However, Rhodes discloses the system of Claim 43, wherein the forecast model further represents a quantity of the product each seller has committed to selling, the system operable to adjust the pre-allocated supply of the product for each seller according to the committed quantity (i.e. link sales and marketing strategies to material and resource scheduling)(page 3). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the system of Claim 43, wherein the forecast model further represents a quantity of the product each seller has committed to selling, the system operable to adjust the pre-allocated supply of the product for each seller according to the committed quantity as disclosed by Rhodes within the James and Fields combination for the motivation of allowing access to relevant data, facilitating fast decision making and providing material and resource management information to sales and marketing teams (page 1).

(F) As to claim 48, James in view of Fields in view of Rhodes in view of Kaye discloses the system of Claim 43, further operable to:

accept a customer order requesting a quantity of a product through each seller (page 6, col. 1, lines 38-50). James does not explicitly disclose compute a promise for the customer order according to the planned supply and one or more existing customer orders, the promise restricted according to the pre-allocated supply of the product.

However, Rhodes discloses computing a promise for the customer order according to the planned supply and one or more existing customer orders, the promise restricted according to the pre-allocated supply of the product (page 3). It would have been obvious to one of ordinary skill in

the art at the time of Applicant's invention to include computing a promise for the customer order according to the planned supply and one or more existing customer orders, the promise restricted according to the pre-allocated supply of the product as disclosed by Rhodes within the James and Fields combination for the motivation allowing access to relevant data, facilitating fast decision making and providing material and resource management information to sales and marketing teams (page 1).

(G) As to claim 50, James discloses the system of Claim 43, further operable to adjust either the forecasted sales or the pre-allocated supply for a product for each seller according to an arrival rate of customer orders for the product through each seller (page 5, col. 1, line 33 - col. 2, line 18 and page 6, col. 1, lines 38-50).

(H) As to claim 59, the claim is the corresponding method claim to system claim 43 and is rejected on the same basis as claim 43.

(I) As to claims 60-64, and 66, the claims are similar in scope to claims 12-16, and 18 and are rejected on the same basis.

4. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over James, Fields, Rhodes and Kaye as applied to claim 43 above, and further in view of Frank O. Smith, "Dun & Bradstreet Software Delivers Sales and Promotion System to Manufacturers" (hereinafter Smith).

(A) As to claim 49, James does not explicitly disclose the system of Claim 43, wherein: each forecast model is extensible such that one or more policy rules may be associated with the corresponding product; each policy rule comprises a restriction on either the forecasted sales or the pre-allocated supply of the product for each seller; and

either the forecasted sales or the pre-allocated supply of the product is computed according to the policy rules.

However, Smith discloses each forecast model is extensible such that one or more policy rules may be associated with the corresponding product (i.e. SPS allows manufacturers to create and manage special product promotions based on product categories or items)(page 1, lines 21-30). Smith further discloses each policy rule comprises a restriction on either the forecasted sales or the allocated supply for each seller (i.e. price and discount effectively dating)(page 2, lines 1-5). Finally, Smith discloses either the forecasted sales or the allocated supply is computed according to the policy rules (i.e. The system takes into account impact of scheduling the requested customer orders with orders already in progress.(page 4, col. 2, lines 35-47, page 5, col. 1, lines 37-40 and page 6, col. 2, lines).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the features of Smith within the James, Fields and Rhodes combination for the motivation of speed and ease of online management of orders tied to special promotions (page 1, lines 32-34).

5. Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over James, Fields, Rhodes and Kaye as applied to claim 59 above, and further in view of Smith.

(A) As to claim 65, the claim is similar in scope to claim 59 and is rejected on the same basis.

6. Claims 51-58, 67-69, and 71-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over James in view of Fields, Rhodes, Kaye and Smith.

(A) As to claim 51, James discloses a system for managing data associated with available-to-promise (ATP) products (i.e. processes that take place in a typical manufacturing environment

from the time the orders are received and the logic to arrive at the capability to promise and confirm planned shipping dates based on capacity constraints and product availability)(page 5, col. 2, lines 32-49), comprising:

planned supply of the product (i.e. planned orders to cover net requirements)(page 4, col. 1, lines 16-22 and page 7, col. 1, lines 47-51);

customer orders for the product through each seller (i.e. customer order servicing)(page 5, col. 2, lines 32-43); and

allocated supply of the product to each seller (i.e. The system takes into account impact of scheduling the requested customer orders with orders already in progress. Check if there is unallocated inventory. If the system checks to see if there is unallocated inventory, then some of the inventory is allocated.)(page 4, col. 2, lines 35-47, page 5, col. 1, lines 37-40 and page 6, col. 2, lines 3-16); and

wherein the system is operable to compute the amount of the product that is ATP at each seller according to the planned supply, the customer orders, the allocated supply, and the amount of the product that is ATP at one or more other sellers (i.e. planned production activity performed by CRP system, customer orders, allocated supply)(page 4, col. 2, lines 48-59, page 5, col. 1, line 33 - col. 2, line 18, and page 7, col. 1, lines 47-51).

James does not explicitly disclose each product being associated with a product forecast model and forecasted sales of the product through each seller. However, Fields discloses each product being associated with a product forecast model (i.e. model covers each of a plurality of products) (col. 2, lines 1-9 and col. 5, lines 46-63); and forecasted sales of the product through each seller (i.e. forecast profile)(col. 3, lines 41-53).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include each product being associated with a product forecast model and forecasted sales of the product through each seller within the James system in order to provide products in timely response to customer demands (col. 1, lines 37-43).

James and Fields do not explicitly disclose pre-allocated supply of the product to each seller, the pre-allocated supply being a supply for the product that has been pre-allocated to each seller for promising to subsequent customer orders for the product through each seller, the pre-allocation of the supply of the product to each seller occurring prior to distribution of the pre-allocated supply of the product to each seller, and the system is operable to compute the product that is ATP at a seller according to the planned supply, the customer orders, the pre-allocated supply and the amount that is ATP at one or more of each sellers at a higher level in a seller hierarchy.

However, Rhodes discloses pre-allocated supply of the product to each seller (i.e. plan sales expectations)(pages 1 and 2) and the system is operable to compute the amount of the product that is ATP at a seller according to the planned supply, the customer orders, the allocated supply and the amount of the product that is ATP at one or more other sellers (page 6 of the Text version of the NPL document of Rhodes). As per the recitation of "the pre-allocation of the supply of the product to each seller occurring prior to distribution of the pre-allocated supply of the product to each seller," the Examiner respectfully submits that Rhodes discloses an order department being able to "look" into the manufacturing system to determine what is currently in production to give a viable ATP date (page 5 of the text version of the NPL document of Rhodes). It is noted that a product must be allocated to a seller before it is distributed to each



seller. For example, a customer placing an order for a product and being told when it will be delivered has “allocated” the product for himself (See also Applicant’s Background of the Invention, page 2, lines 15-26). The product is then delivered to the customer (“distributed”) after an order has been placed (See also Applicant’s Background of the Invention, page 2, lines 15-26). As per the recitation of “at a higher level in a seller hierarchy,” Rhodes discloses allowing business information systems to communicate with different trading partnerships, where the system encompass the flow of physical goods (and information) from the supplying organizations into the businesses and subsequently to its customers (page 6 of NPL document of Rhodes—Text Version).(Note: Page 6, Paragraph 5 of the (non-patent literature) (NPL) reference of Rhodes teaches transferring goods from supplying organizations to businesses and then to customers which is a form of hierarchy. In addition, Page 5 of this NPL reference teaches resource planning with respect to purchasing and production and the Office takes the a supplying organization plans production based on the demand from businesses that their seller model forecasts and a business in turn plans their purchasing based on demand from customers that their seller model forecasts. Therefore, this section of Rhodes implicitly discloses a hierarchy of seller models and one or more seller models.)

Finally Rhodes teaches a process that adjusts the pre-allocated supply of the product to each seller according to customer orders across a time horizon and re-computes the amount of the product that is ATP at each seller according to the adjusted pre-allocated supply (Rhodes: NPL Document of Rhodes—Page 5, Lines 43-65.) (Note: Rhodes states in this section that the available to promise estimate given to a customer is accurate and current and states that when a customer calls to place an order an available promise date is given to the customer which is

accurate and current. Based on this disclosure, the Office takes the position that each time a new order is placed by a customer then the pre-allocated supply would have to be adjusted (by the supplying organization) to meet the customer demand and the available to promise date would necessarily be recalculated in order to produce a current and accurate date available to promise dates as required by Rhodes). (Note: Fields also teaches this adjusting and re-computing feature (Fields: Col. 6, Ln. 4-23).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include pre-allocated supply of the product to each seller, the pre-allocated supply being a supply for the product that has been pre-allocated to each seller for promising to subsequent customer orders for the product through each seller and the system is operable to compute the product that is ATP at a seller according to the planned supply, the customer orders, the pre-allocated supply and the amount that is ATP at one or more of each sellers as disclosed by Rhodes within the James and Fields combination for the motivation of ease of allowing access to relevant data, facilitating fast decision making and providing material and resource management information to sales and marketing teams (page 4 of the NPL document of Rhodes—Text Version-Abstract).

James, Fields, Rhodes and Kaye do not explicitly disclose at least one seller model representing a seller for products that each correspond to an item having one or more restrictions on its sale, at least two products corresponding to the same item but with at least one different restriction.

However, Smith discloses at least one seller model representing a seller for products that each correspond to an item having one or more restrictions on its sale, at least two products

corresponding to the same item but with at least one different restriction (i.e. SPS enables manufacturers to easily track and manage special sales promotions separate and independent of standard company pricing policy. SPS enables manufacturers to create and manage special product promotions based on ... by customer type or specific customer account.)(page 1, lines 21-30).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include at least one seller model representing a seller for products that each correspond to an item having one or more restrictions on its sale, at least two products corresponding to the same item but with at least one different restriction within the James, Fields and Rhodes system in order to speed and ease online management of orders tied to special promotions (page 1, lines 32-34).

(B) As to claim 52, James discloses he system of Claim 51, wherein the restrictions are selected from the group consisting of quantity restrictions, and lead time restrictions (i.e. whether customer specified date can be met. Check if requirements can be satisfied by unallocated inventory or unallocated scheduled production.)(page 5, col. 1, line 33 - col. 2, line 18).

James does not explicitly disclose wherein the restrictions are selected from price restrictions. However, Smith discloses wherein the restrictions are selected from price restrictions (i.e. ,manage special sales promotions separate and independent of standard company pricing policy). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include wherein the restrictions are selected from price restrictions within the James, Fields and Rhodes system in order to speed and ease online management of orders tied to special promotions (page 1, lines 32-34).

- (C) As to claim 53, the claim is similar in scope to claim 44 and is rejected on the same basis.
- (D) As to claim 54, the claim is similar in scope to claim 45 and is rejected on the same basis.
- (E) As to claim 55, the claim is similar in scope to claim 47 and is rejected on the same basis.
- (F) As to claim 56, James and do not explicitly disclose the system of Claim 51, further operable to:

computing a promise for the customer according to the pre-allocated supply for corresponding products.

However, Rhodes discloses computing a promise for the customer order, the promise being computed according to the pre-allocated supply of the product (page 2, lines 8-15 and lines 28-33). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include computing a promise for the customer according to the pre-allocated supply for corresponding products as disclosed by Rhodes within the James and Fields combination for the motivation of allowing access to relevant data, facilitating fast decision making and providing material and resource management information to sales and marketing teams (page 1).

James, Fields and Rhodes do not explicitly disclose accept a customer order requesting quantities of one or more items through each seller; and compute a promise for the customer order according to the allocated supply for corresponding products, wherein the promise comprises a plurality of options each with one or more of the restrictions specified for these products.

However Smith discloses accepting a customer order requesting quantities of one or more items through each seller and computing a promise for the customer order according to the allocated supply for corresponding products, wherein the promise comprises a plurality of

options each with one or more of the restrictions specified for these products (i.e. SPS enables manufacturers to easily track and manage special sales promotions separate and independent of standard company pricing policy. System enhancements include on line available to promise by item ...)(page 1, lines 21-30 and page 2, lines 1-5).

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include accepting a customer order requesting quantities of one or more items through each seller and computing a promise for the customer order according to the allocated supply for corresponding products, wherein the promise comprises a plurality of options each with one or more of the restrictions specified for these products within the James, Fields and Rhodes system in order to speed and ease online management of orders tied to special promotions (page 1, lines 32-34).

(G) As to claim 57, the claim is similar in scope to claim 49 and is rejected on the same basis.

(H) As to claim 58, the claim is similar in scope to claim 50 and is rejected on the same basis

(I) As to claim 67, the claim is the corresponding method claim to system claim 51 and is rejected on the same basis as claim 51.

(J) As to claims 68-74, the claims are similar in scope to claims 52-58 and are rejected on the same basis.

### ***Response to Arguments***

7. Applicant's arguments filed on May 25, 2011 have been fully considered but they are not persuasive.

(1) Applicant argues that the Kaye reference does not teach nor suggest "a hierarchy of seller models, each seller model representing a seller of one or more products within a hierarchy of

sellers and within a seller organization." However, the Office takes the position that Kaye does in fact teach this feature (Kaye: Col. 3, Ln. 50-Col. 4, Ln. 26). This cited portion of Kaye talks about a family/subfamily item format which is equivalent to a hierarchy. The family/subfamily terms in Kaye are used in reference to inventories managed by sellers or seller organizations (Kaye: Col. 1, Ln. 65-Col. 2, Ln. 11). The motivation for combining the teachings of Kaye with those of the other prior art references is so that various organizations (within a hierarchy) can more easily communicate with each other in a universal format, as suggested by Kaye (Col. 3, Ln. 50-67 and Col. 4-11). Applicant argues that Kaye does not teach nor suggest a "common, universal inventory." However, the Office would like to point out that the applicant's claims do not require or attempt to claim "a common, universal inventory." Moreover, the Office would like to point out that Kaye teaches "a common, universal inventory" because Kaye discusses that a user at one location can access the inventory available at another location if they are in need of a particular item (Kaye: Col. 4, Ln. 10-26). This disclosure in Kaye suggests the existence of "a common, universal inventory."

(2) With regard to the 35 U.S.C. 103 rejections, the applicant argues that Fields does not teach "at least two seller models that each represent a seller for one or more products" wherein each product is associated with a "product forecast model". However, Fields clearly discloses two seller models (Fields: Col. 2, Ln. 1-9). Fields clearly teaches that a model can cover a plurality of business items and the Office, therefore, takes the position that this means that the model disclosed in Fields is applied to many different business items wherein each item is covered by a model as is suggested by the "Summary" section in Fields. Therefore, since Fields discloses a plurality of items that can be covered by its model it inherently discloses a plurality

(including two) of seller models. In one embodiment of Fields, the two products Fields mentions in the above cited passages come from two different sellers. In the cited portion of Fields, there is a disclosure stating that the demand for a plurality (more than one) of products is tracked in the invention of Fields. Based on this disclosure, the Office interprets this as meaning that there are at least two seller models that are disclosed because since the step of "tracking" in Fields involves more than one product it is inherent that the multiple products can be ordered by more than one seller. The Office also interprets this disclosure in Fields as teaching the step of "tracking" which includes tracking a "hierarchy of at least two seller models that each represent a seller for one or more products, each product having a product forecast model" (Fields: Col. 2, Ln. 65-Col. 3, Ln. 13). Furthermore, in the above cited portion of Fields, there is a suggestion that the demand for many different products can be projected using its invention including products for retail sales and internal use products. The Office takes the position that this disclosure implicitly discloses two seller models because it is common that in many larger companies or organizations there may be an internal sales unit that sells to the larger business while the larger business unit in turn sells products or services in a retail environment or to the public, one example is the Federal government and the internal sales unit being the General Services Administration. Therefore, it follows that in Fields the projections made for the internal sales unit constitutes one and a separate model than the projections made for the retailing division of the same company or organization because these are frequently considered two different sellers for accounting purposes and also for the fact that each seller has different customers (e.g. the internal sales unit sells to the company at large while the company at large sells in a retailing environment or to the public.)

The Office takes the position that the mention in Fields (Fields: Col. 2, Ln. 65-Col. 3, Ln. 13) of the possibility that its invention could be applied to many products and tasks is analogous to the invention being applied to two different sellers. For example, in the above cited section, Fields clearly contemplates that its invention can be applied to two different products. The two products could be as disparate as a luxury car and a king-sized bed. These items are not normally carried by one retailer and are, in fact, carried by separate retailers. Therefore, the above cited disclosure in Fields clearly contemplates two different sellers.

(3) Applicant argues that the Rhodes reference does not disclose “pre-allocated supply of the product to each seller, the pre-allocated supply is a supply of the product pre-allocated to each seller to promise subsequent customer orders for the product through each seller” and “computing the amount of the product that is ATP at a seller according to at least the planned supply of the product.” And that Rhodes does not disclose pre-allocated supply of the product. However, as has been set forth in the above, Rhodes discloses this very feature (Rhodes: Page 5 of the NPL document of Rhodes—Text Version) and proper motivation has been set forth for combining the teachings of Rhodes with those of the teachings of James in view of Fields. This section of Rhodes requires that the projections of ATP product be accurate and current and therefore it is inherent that Rhodes “computes and (re-computes and adjusts) the amount of product that is ATP at a seller according to at least the planned supply of the product across a time horizon.)

Furthermore, Page 5, Lines 44-56 of the printout of the Rhodes NPL references states that the concept of linking what is currently in production to available to promise dates is a continuous, cyclical process as evidenced by the phrase “(the forecasting) process starts all over



again". The Office takes the position that this disclosure in Rhodes is equivalent to the step of "adjusting the pre-allocated supply of the product to each seller according to customer orders across a time horizon and re-computing the amount of the product that is ATP at each seller according to the adjusted pre-allocated supply."

(4) Applicant argues that the concept of "determining what's currently in production" in Rhodes does not equate to a pre-allocated supply of the product because the pre-allocated supply of the product is a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller.

To respond to this argument, the Office would like to point out that Rhodes specifically ties what is currently in production to available to promise (ATP) dates (Rhodes Printout, Page 5, Lines 44-56). In this cited section, Rhodes goes on to state that customer orders, as obtained from the manufacturing/production system, are fed into product forecasting system. Therefore, the Office takes the position that this cited portion of Rhodes teaches a "pre-allocated supply of the product to each seller, the pre-allocated supply is a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller." In this cited portion of Rhodes it appears that what is currently in production is tied to various available to promise dates so that the manufacturer can give viable available to promise dates (i.e. promise to subsequent customer orders for the product through each seller) to each seller. Although the applicant may argue that Rhodes only discloses the step of "determining what's currently in production" and then goes on to argue that this disclosure does to equate to a supply of a product pre-allocated to each of the hierarchy of sellers prior to receiving customer orders, the fact remains that Rhodes discloses looking into a manufacturing system and one of ordinary skill in

the manufacturing and inventory field would recognize that this step could be performed prior to receiving customer orders so that a manufacturer would be ready to process those customer orders more efficiently based on what's currently in product and, thus, what is expected to be produced.

(5) Applicant's argue that the Rhodes references does not disclose the following: "hierarchy of seller models, each seller model representing a seller of one or more products within a hierarchy of sellers and within a seller organization." This argument is now moot in view of the newly added Kaye patent reference which teaches this feature, as has been set forth above in the rejection of Claim 43.

(6) Applicant argues that the prior art must disclose each and every element of the claimed invention and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. Applicants argue that the prior art used in the 35 U.S.C. 103 rejections do not teach each and every limitation and also that there is no motivation for combining these references. However, the Office would like to note that the prior art does in fact teach each and every element of the claimed invention. The motivation to combine or modify the prior art is also taken from the prior art, as cited above in the 35 U.S.C. 103 rejections. Applicants also argue that the Office has not established a prima facie case of obviousness. To respond to this, the Office would like to point out that it has clearly pointed out where all the limitations of the claims are taught in the prior art and has also provided proper motivation for combining these references.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivek Koppikar, whose telephone number is (571) 272-5109. The examiner can normally be reached from Monday to Friday between 8 AM and 4:30 PM. If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Jerry O'Connor, can be reached at (571) 272-6787. The fax telephone numbers for this group are either (571) 273-8300 or (703) 872-9326 (for official communications including After Final communications labeled "Box AF").

Another resource that is available to applicants is the Patent Application Information Retrieval (PAIR). Information regarding the status of an application can be obtained from the (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAX. Status information for unpublished applications is available

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through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, please feel free to contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Applicants are invited to contact the Office to schedule either an in-person or a telephonic interview to discuss and resolve the issues set forth in this Office Action. Although an interview is not required, the Office believes that an interview can be of use to resolve any issues related to a patent application in an efficient and prompt manner.

Sincerely,

/Vivek D Koppikar/

Primary Examiner, Art Unit 3686

6/8/2011